

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-3 (Cancelled).

Claim 4 (Previously Presented): A radio base station controller which is connected to a plurality of base stations configured to generate a plurality of beam patterns and controls an antenna installed in each of the base stations and composed of a plurality of antenna devices in order to carry out a radio communication with a mobile station, the radio base station controller comprising:

- (a) an antenna controller configured to control the antenna; and
- (b) at least one modulating/demodulating device configured to modulate and demodulate a signal which is transmitted to and received from the mobile station, wherein the antenna controller comprising:
  - a selector configured to select at least one of the antenna devices from the plurality of base stations; and
  - a setter configured to set a weight of the at least one of the antenna devices.

Claim 5 (Previously Presented): A radio base station controller which is connected to a plurality of base stations configured to generate a plurality of beam patterns and controls an antenna installed in each of the base stations and composed of a plurality of antenna devices in order to carry out a radio communication with a mobile station, the radio base station controller comprising:

- (a) an antenna controller configured to control the antenna; and
- (b) at least one modulating/demodulating device configured to modulate and demodulate a signal which is transmitted to and received from the mobile station,

wherein the antenna controller comprising:

a selector configured to select at least one of the antenna devices from the plurality of base stations; and

a setter configured to set a weight of the at least one of the antenna devices,

and the setter has a device configured to determine the weight of the antenna device so that fixed channels do not interfere with each other in case where the fixed channels assigned to different mobile stations are the same.

Claim 6 (Previously Presented): A radio base station controller which is connected to a plurality of base stations configured to generate a plurality of beam patterns and controls an antenna installed in each of the base stations and composed of a plurality of antenna devices in order to carry out a radio communication with a mobile station, the radio base station controller comprising:

(a) an antenna controller configured to control the antenna; and

(b) at least one modulating/demodulating device configured to modulate and demodulate a signal which is transmitted to and received from the mobile station,

wherein the antenna controller comprising:

a selector configured to select at least one of the antenna devices from the plurality of base stations; and

a setter configured to set a weight of the at least one of the antenna devices,

and the antenna controller further has a measuring device configured to measure respective reception strength of respective antenna devices of the plurality of antenna devices in the plurality of base stations.

Claim 7 (Previously Presented): The radio base station controller of claim 4, wherein the mobile station is configured to run on a road, and at least a part of the plurality of base stations are arranged along the road.

Claims 8-11 (Cancelled).

Claim 12 (Previously Presented): A radio communication system comprising:

(a) at least one mobile station having a device configured to select, from a plurality of same reception signals, a reception signal in which a reception state is better;

(b) a first base station controller having a device configured to detect a start of a communication between a predetermined first base station and a the mobile station, a device configured to request a hand-over process to the mobile station, and a device configured to transfer a transmission signal to the mobile station to a second base station controller of a hand-over destination of the mobile station, the first base station controller connected to a first base station group including the predetermined first base station,

wherein the second base station controller has a device configured to transmit the transmission signal transferred from the first base station controller, through a predetermined second base station to the mobile station, the second base station controller connected to a second base station group including the predetermined second base station.

Claim 13 (Previously Presented): The radio communication system of claim 12, wherein the predetermined first and second base stations are arranged close to a boundary between the first and second base station controllers.

Claim 14 (Previously Presented): The radio communication system of claim 12, wherein the mobile station is configured to run on a road, and

at least a part of the first and second base station groups including the predetermined first and second base stations is positioned in a portion in which a movement destination of the mobile station on the road can be pointed out.

Claim 15 (Previously Presented): The radio communication system of claim 14, wherein the first base station controller further comprises:

a device configured to detect a speed of the mobile station; and

a device configured to change the predetermined first base station, in accordance with the detected speed.

Claim 16 (Previously Presented): The radio communication system of claim 14, wherein the first and second base station groups arranged along the road are arranged in a predetermined interval, and an interval between a first base station and a second base station which are the closest to each other is shorter than the predetermined interval.

Claim 17 (Previously Presented): The radio communication system of claim 14, wherein the first and second base station controllers select an optimal transmission rate and error correction code in accordance with a speed of the mobile station when performing a hand-over process on the mobile station, and then carry out a transmission and a reception to and from the mobile station.

Claims 18-19 (Cancelled).

Claim 20 (Previously Presented): A radio communication method comprising the steps of:

(a) detecting a start of a communication between a predetermined first base station connected to a first base station controller and a mobile station running on a road;

(b) requesting a hand-over process to the mobile station;

(c) transferring to a second base station controller, a signal to be transferred through the predetermined first base station to the mobile station;

(d) transmitting the signal to the mobile station through a predetermined second base station connected to the second base station controller; and

(e) selecting a better signal in which a reception state is better, from two signals received by the mobile station,

wherein the predetermined first and second base stations are arranged close to a boundary between the first and second base station controllers,

and the first base station controller is connected to a first base station group including the predetermined first base station,

the second base station controller is connected to a second base station group including the predetermined second base station, and

at least a part of the first and second base station groups including the predetermined first and second base stations is arranged along a portion in which a movement destination of the mobile station on the road can be pointed out.